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ABSTRACT

This monograph has been prepared and published to disseminate the results of recent scientific research in rehabilitation counseling and related areas. The twenty abstracts in this volume reflect the quality and variety of research which is currently underway throughout the country. Topics included are: (1) counselor orientation; (2) mental retardation; (3) attitudes; (4) perception; (5) interpersonal relationships; (6) physical handicaps; (7) cerebral palsy; and (8) supervisory practices. (KJ)

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ABSTRACTS OF RESEARCH IN REHABILITATION

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The Top Twenty Research Selections by the 1969 Research Awards Committee of American Rehabilitation Counseling Association

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ABSTRACTS OF RESEARCH IN REHABILITATION

The Top Twenty Research Selections by the 1969 Research Awards Committee of The American Rehabilitation Counseling Association

EDITORS

Paul R. Salomone
Jerold D. Bozarth
Ellen L. Betz

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PREFACE

This monograph has been prepared and published to disseminate the results of recent scientific research in rehabilitation counseling and related areas. The twenty abstracts in this volume reflect the quality and variety of research which is currently underway in universities, rehabilitation facilities, and rehabilitation research institutes throughout the country. The winning award and those with honorable mentions are noted in the table of contents.

The American Rehabilitation Counseling Association, through its Research Awards Committee, has demonstrated a professional commitment to the continued growth of knowledge in rehabilitation counseling by annually citing the outstanding researchers for the previous year. ARCA recognizes that scientific research is an essential ingredient to the continued growth of the field of rehabilitation counseling. The presentation of annual research awards underscores the Association's view that scientific research is an integral part of a professional organization's activities.

The authors of the research abstracted in this monograph, except for two researchers, provided the abstracts for this volume. We wish to thank them for their willingness to write a summary of their work. However, since the abstracts were edited to conform to the perceived needs of the professional reader, we accept full responsibility for the final product.

Readers interested in the procedures used by the 1969 ARCA Research Awards Committee (which included, besides the editors, John R. Barry) are referred to an article published in June 1970 issue of the *Rehabilitation Counseling Bulletin.*

Finally, we offer our thanks to the Arkansas Rehabilitation Research and Training Center at the University of Arkansas and the Arkansas Division of Vocational Rehabilitation for publishing this work.

PRS
July,1970

CONTENTS

Preface

Counselor Orientation: Relationship with Responsibilities and Performance
M. J. Ayer, G. N. Wright and A. J. Bulter 1

Midlife Attainment of the Mentally Retarded: A Longitudinal Study
W. R. Baller, D. C. Charles and E. L. Miller 3

5A-B Therapist Research Findings: Methodological Considerations, New Data and Interpretations
R. L. Bednar and M. Mobley 5

Client Susceptibility to Presuasion and Counseling Outcome
R. L. Bednar and C. A. Parker 7

The Measurement of Occupational Reinforcer Patterns, and Occupational Reinforcer Patterns
F. H. Borgen, D. J. Weiss, H. E. Tinsley, R. V. Dawis and L. H. Lofquist 9

Socio-Cultural Correlates of Pain Response
V. A. Christopherson, F. M. Swartz and B. H. Miller 11

Social Desirability and Attitudes Toward the Disabled
L. B. Feinberg 13

Caseload Feasibility in an Expanded Vocational Rehabilitation Program
C. D. Hammond, G. N. Wright and A. J. Bulter 15

Accuracy of Social Perception of Physically Handicapped and Non-Handicapped Persons
R. A. Ingwell, R. M. Thoreson and S. J. Smits 17

[2]Interpersonal Relationships in Rehabilitation
F. V. Janzen, G. Q. Jorgensen, R. A. Macguffie,
D. A. Israel, W. McPhee, and C. O. Samuelson 19

[3]Attitudes Toward Education and Physically Handicapped Persons in Eleven Nations
J. E. Jordan 23

The Effects of Motor Development Lessons on Mentally Retarded Children
D. L. Lillie 27

[4]Client-Counselor Compatibility and the Outcome of Counseling
G. A. Mendelsohn and N. O. Rankin 31

Cerebral Palsied Studies - Their Education and Employment
J. E. Muthard and J. H. Hutchison 33

A Follow-Up Counseling Program: A Study of the Influence of Continued Counseling on the Employability of Disabled Workshop Trainees
W. S. Neff, B. Novick and B. Stern 35

Training the Pre-School Retarded Child in Focusing Attention: A Program for Parents
S. Santostefano and S. Stayton 39

A Descriptive Study of Supervisory Practices as Perceived by Counselors in State Vocational Rehabilitation Agencies
S. J. Smits and W. J. Aiken 43

Adolescent Symptomatology
G. Spivack and J. Spotts 45

[1]The Measurement of Attitudes Toward Disabled Persons
H. E. Yuker, J. R. Block and J. H. Young 47

Achievement Motivation Among Negro Adolescents in Regular and Special Education Programs
R. S. Zito and J. J. Bordon 49

[1]Winning Award
[2]1st Honorable Mention
[3]2nd Honorable Mention
[4]3rd Honorable Mention
[5]4th Honorable Mention

COUNSELOR ORIENTATION: RELATIONSHIP WITH RESPONSIBILITIES AND PERFORMANCE

Ayer, M. J., Wright, G. N., and Butler, A. J. Wisconsin Studies in Vocational Rehabilitation, Madison, Wisconsin: Regional Rehabilitation Research Institute, 1968, Series 1, Monograph X.

This study was concerned with the professional responsibilities of eligibility determination and employment placement in providing rehabilitation services to disabled persons. A major purpose was to investigate relationships between the professional orientation of the counselor and his attitudes toward these responsibilities. A second purpose was to evaluate the relationship between orientation and case performance, as indicated by the counselor's interaction with referral sources, by the disability categories represented in his caseload, and by his operational definition of client characteristics associated with declarations of nonfeasibility.

The major purposes of the study were to test the relationships between counselor orientation and attitudes toward selected professional responsibilities and between orientation and case performance data. The general hypotheses and related specific hypotheses were as follows:

(a) There is a relationship between counselor orientation and attitudes toward selected professional responsibilities including: (1) counselor orientation and attitudes toward eligibility determination; and (2) counselor orientation and attitudes toward employment.

(b) There is a relationship between counselor orientation and attitudes toward professional development including: (1) counselor orientation and attitudes toward in-service or out-service educational needs; and (2) counselor orientation and attitudes toward service orientation and indoctrination procedures.

(c) There is a relationship between counselor orientation and case performance including: (1) counselor orientation and the primary reason for nonacceptance of applicants; (2) counselor orientation and the source of referral; and (3) counselor orientation and the major disabling condition of the client.

The sample consisted of 279 counselors employed in the state rehabilitation agency offices of Region V. The sample was, in summary, heterogeneous in education, prior work experience, and present counselor function.

The data were derived from two studies which were conducted simultaneously – the Rehabilitation Counselor Survey (RCS) and the Patterns of Rehabilitation Services (POS). The RCS was designed to elicit information about a variety of rehabilitation situations and problems. The design of the POS study was partly intended to include kinds of judgments influencing some of the counselors' decisions on client eligibility. To test the hypothesis that these judgments were influenced by orientation, data on clients were compared to their counselors' orientations.

The data analyses were comprised of two statistical procedures: (a) comparisons of

RCS responses with professional orientation; and (b) comparisons of professional orientation with case performance data.

Significant relationships were found between rehabilitation counselor professional orientation and auxiliary variables from the RCS survey schedule, including undergraduate education, prior work experience, and questions concerning case finding, perceived major professional problems, and solution to paramount problems. Interview responses on these variables were consistent with operational definitions of the orientations. Because the data yielded relatively few significant results from the total number of comparisons, the authors suggested that situation problems related to eligibility determination, employment placement, and professional development are common to all counselors, with a limited number of available solutions. These results suggest that different counselors skills and interests may predispose to greater effectiveness in specific areas, for example, relationship counselors in counseling.

The comparison of orientation with client data from the NRA Patterns of Rehabilitation Services project revealed a significant interaction between the primary reason why individuals were not accepted for services and counselor orientation. The nonrelationship counselors emphasized client failure to respond to services and disability-related problems. Their pattern of responses indicated a desire to avoid involvement in difficult, long-term, time-consuming cases.

The relationship between professional orientation and responses to questions from the counselor survey were evaluated by chi-square analysis, one for each question using the four counselor orientations and a second chi-square for each question using the dichotomous combinations. There were no significant chi-squares under the first two general hypotheses.

Auxiliary questions and demographic data from the counselor survey resulted in seven significant chi-squares; relationships were demonstrated between orientation and case-finding problems, major professional problems, and recommended solutions, and with the demographic data of undergraduate education and prior work experience (the four orientations were used separately in these analyses). There were also significant relationships between the dichotomous classifications of relationship and nonrelationship classifications and education.

From these demographic variables Ayer et al. inferred a relationship between previous work experience and undergraduate degree with professional orientation. A logical inference is the importance of previous experiences in shaping counselor philosophy and theory. Certain personal traits of the counselor may predispose one to a particular program of education or a counselor may be oriented in a certain way irrespective of type of education; support for these hypotheses is derived from the presence of relationship-oriented counselors with both no degree or an unrelated degree and situation-oriented or neutral counselors with a related degree.

MIDLIFE ATTAINMENT OF THE MENTALLY RETARDED: A LONGITUDINAL STUDY

Baller, W. R., Charles, D. C. and Miller, E. L. Genetic Psychology Monographs, 1967, 75, 235-329.

The purpose of the study was to locate the members of three groups of persons of differing levels of mental ability and to evaluate their present social status, ability, and functioning, and to identify factors related to varying levels of life adjustment. All groups had originally been studied by Baller in the mid-1930's. One was a "Low" group of 206 who had received special education in Lincoln, Nebraska. All members of the group were 21 years or older at the time of original study; all had mental ability ratings below 70 IQ. Baller found them functioning better as a group than the early prognoses had indicated. This group was studied again in 1950, as well as in the presently reported research. A "Middle" group with original IQ's between 70 and 80, and a "High" group possessing average abilities were matched with the subjects of the Low group for comparison purposes.

At the time of the most recent study the subjects were in their middle 50's and widely dispersed. The average age of the Low group was 56 years. About 60% of the original Low group was accounted for; 72% of the Middle group, and 60% of the High group.

Information on present social status was gathered from primary and secondary sources. Some subjects from each group were given intelligence tests. All subjects available were interviewed and some filled out "life-history" blanks.

Some Findings of the Thirty-year Evaluation

The present social status of members of the three groups is indicated by the following data. Only 9 out of 205 subjects in the two lower groups had been institutionalized and no incarcerations were of recent origin. The Low group had a relatively high death rate; nearly a third of "located" subjects were decreased as compared to 10 percent and 12 percent of the other groups. The death rate in the Low group had however, been much lower since 1950 than from 1935 to 1950.

Low group subjects were more likely than others to be living alone, in part because of difficulty in getting and keeping a mate. Over half however, were married and living with a spouse.

The vocational and economic situation for the Low group proved to be more encouraging than anticipated. Steady economic improvement had been observed since the 1930's. At the time of the current study, 67% of the Low group were self-supporting with another 16% needing "some help" to get along. Thus, about 80% of the group were usually employed, with over half having held the same job for several years. Nearly total employment was found in both the Middle and High groups; comparative occupational level rose sharply in the latter group.

In general, the members of all three groups were law-abiding. Less than 10% of the two lower groups and none of the high group had civil convictions. Most of the convictions were for typically lower-class offenses (e.g., drunkenness and disorderly conduct) rather than for anti-social acts and the more serious crimes.

Community involvement reflected class patterns; 60% of Low group subjects were without membership in any community club or organization, while half the Middle and only a fourth of the High group had no such ties. Active participation occurred in reverse order.

A "clinical-social" evalution was made of all Low group subjects' abilities, with the following results: permanently retarded, 14%; low test scores but "getting along" in society, 14%; below average or borderline (-1 level on AAMD classification), 46%; average or better, 24%; multiply handicapped, 2%. The Middle group showed a slight rise in test scores, while the High group repeated it's original mean.

Desirable "growing-up" experiences ranged downward through the three groups. The Low group suffered in comparison with the other groups from a lack of good health in early life, from poor instruction regarding personal appearance, and from ineffectual advice in general. They also suffered from limited opportunities to be raised by parents, to have the mother at home, to go to Sunday School, to have parents who were interested in their life work, and to receive sound educational and vocational instruction. The bleakness of the early experience of these subjects suggested the term "culturally deprived."

Differences in life experiences between "most successful" and "least successful" Low group subjects were analyzed. Successful males were likely to have acquired a skill early and to have worked at it continuously. They usually were employed by a large paternalistic employer such as a railroad company rather than holding a series of different jobs. Also, they were likely to have stayed in one community rather than to drift about. Successful females were likely to have learned principles of good grooming and health care early, to have married well, and to be working steadily. Unsuccessful females generally had learned habits of dependence and attachment to their mother and their home.

In summary, a great majority of the Low group proved to be, superficially at least, indistinguishable from the generality of men and women in their 50's.

A-B THERAPIST RESEARCH FINDINGS: METHODOLOGICAL CONSIDERATIONS, NEW DATA AND INTERPRETATIONS

Bednar, R. L. and Mobley, M. Fayetteville, Arkansas: Arkansas Rehabilitation Research and Training Center, 1969.

The A-B interaction hypothesis suggests that A therapists are most effective with schizophrenic clients and B therapists are most effective with psychoneurotic clients. It has been assumed that these differential treatment effects are a function of differences in the therapeutic relationship offered by A and B therapists. The purpose of the current investigation was to provide a test of the A-B interaction hypothesis with a factorial arrangement of treatments in which the A-B status of the therapist and client diagnosis were clearly and uniformly isolated as independent variables. The dependent variables were client improvement and the therapeutic relationship, as measured by a variety of process and outcome measures.

The sample consisted of 14 A and 14 B therapeutic dyads. Only clients diagnosed as schizophrenic or psychoneurotic were included in this study. Measures reflecting the empathy, warmth, genuineness and depth of client self-exploration, as perceived by the client, therapist, and three highly trained raters, were obtained for the 28 therapeutic dyads. Analysis of the empathy, warmth, and genuineness ratings characterizing the therapist revealed no significant differences between A and B therapists. The client variable, depth of self-exploration, interacted significantly with therapist A-B type in a manner consistent with the A-B interaction hypothesis. In brief, clients responded to A-B therapist differentially, as measured by the Depth of Self-Exploration scale, but in the apparent absence of corresponding differences in the therapeutic conditions offered by the therapists. In short, schizophrenic and psychoneurotic clients did respond to A-B therapist differentially, but not as a result of any therapist behavior that was identifiable.

Ten outcome measures reflecting client improvement were administered on a pre-post experimental basis. These were the MMPI, a Q Sort, the Four Secondary Factors and Total Adjustment score from the Spitzer Psychiatric Status Schedule, and the Current Adjustment Rating Scale completed independently by the treating therapist, a psychometrist, and the client. These measures were analyzed in a split-plot design using therapist A-B type and client diagnosis as between subject factors and the pre-post measures as the within subject factor.

There was significant improvement from pre- to post-testing on all ten criterion variables. On four of these measures, the A-B variable accounted for a significant portion of the improvement variance. One outcome measure, the Q Sort, provided results consistent with the A-B interaction hypothesis. The significant main effect results on the other three criterion variables suggested that A therapists tended to be better than B therapists in alleviating problems of subjective distress with both schizophrenic and psychoneurotic clients, and B therapists tended to be better than A therapists at dealing with problems of impulse control with both schizophrenic and psychoneurotic clients.

The obtained results did not suggest any pervasive differential treatment success of A-B therapists with schizophrenic and psychoneurotic clients. Neither was there any evidence suggesting that A-B therapists differed in the therapeutic conditions they offered their clients. These results were not viewed as providing consistent support for the A-B interaction hypothesis. Rather, the data seemed to suggest that A-B therapists differ in the areas of psychological functioning in which they effect constructive personality change, regardless of client diagnosis. In brief, the A-B variable may be more relevant to types of psychological change effected than client diagnosis.

CLIENT SUSCEPTIBILITY TO PERSUASION AND COUNSELING OUTCOME

Bednar, R. L. and Parker, C. A. Journal of Counseling Psychology, 1969, 16 (5), 415-420.

Recent theoretical and empirical findings have suggested that any form of counseling intervention may be successful if the client has sufficient belief in the efficacy of the treatment he is receiving. The purpose of the present study was to investigate the role of client susceptibility to persuasion, expectations for personal growth, and divergent treatment methods in the process of behavior change. This was accomplished by an experimental evaluation of client responses to divergent counseling treatments under different levels of susceptibility to persuasion and expectations for improvement.

The study employed a randomized design with a 2x2x2 factorial arrangement of treatments. Factor one was high-low client susceptibility to persuasion; factor two was high-low expectations for personal growth; and factor three was two different programmed counseling interventions. The first counseling program was oriented toward facilitating open expression of emotions and feelings and was patterned after Self Theory formulations. The second programmed counseling unit worked toward rational control and understanding of emotions and feelings and was patterned after Rational Emotive Psychotherapy.

The rationale of the persuasion-placebo-effect hypotheses suggests that opposing counseling treatments should be equally successful in changing behavior, but in opposing directions, should impart different concepts from understanding emotions, and should produce equivalent client satisfaction. In addition heightened client susceptibility to persuasion and expectations should have a significant, positive influence on the magnitude of behavior change.

The results of this study are summarized as follows:

1. Six different bipolar semantic differential criterion variables were employed to measure the degree of attitude and value change attending each of the two counseling treatment programs. Four of the six criterion variables were sensitive to changes in predicted directions at highly significant levels. These data were regarded as giving substantial support to the hypothesis that both counseling treatment programs would be equally effective in producing equivalent but opposite changes in the experimental subjects.

2. Two content acquisition criterion variables were employed to determine if the two counseling treatment programs did impart a different conceptual basis for understanding emotions and feelings. Both of these criterion variables yielded highly significant results in directions consistent with the notion that the two treatment programs would impart different conceptual systems for understanding emotions and feelings.

3. On four different client satisfaction criterion variables, there was no evidence to indicate that either of the two counseling treatment programs were regarded as more

valuable or effective by the experimental subjects. These findings were consistent with the hypothesis that there would be no significant differences in the client satisfaction resulting from the two treatment programs.

4. Using attitude change, client satisfaction and content acquisition as criterion variables, the analysis of the data yielded no evidence to support the hypothesis that heightened client expectations for personal growth significantly influenced the subject's response to the programmed counseling treatments. Neither did any of the data support the contention that persuasibility would significantly influence attitude change or the content acquisition of the programmed materials. However, there were consistent findings on all four client satisfaction criterion variables indicating that the high persuasibility subjects regarded the counseling treatment programs as more valuable to themselves and others, as well as being more willing to continue their participation in the treatment programs and attempt new behavioral methods in dealing with their emotions and feelings.

In brief, there was substantial and consistent evidence demonstrating that both of the counseling treatment programs were successful in changing client value responses in directions consistent with their respective goals. Also, there was strong and convincing evidence indicating that there was a differential response in client satisfaction in which there was no difference between the two treatment programs, but differences within each treatment in which the high persuasibility *Ss* reported higher degrees of self-satisfaction. However, there was no evidence to support the assertion that persuasibility or expectations alone significantly influence the client's response to counseling treatments.

It appears that persuasibility as defined in this study includes a strong evaluative component but does not influence the actual magnitude of attitude change. This observation raises an interesting question. Perhaps the high persuasibility *Ss'* over-evaluation of the benefits of the counseling treatment is the initial stage of a nonspecific placebo-effect which gives the client additional confidence in his ability to deal with his problem. Whether this belief produces continued positive changes over a period of time is still an empirical question for future study.

THE MEASUREMENT OF OCCUPATIONAL REINFORCER PATTERNS, AND OCCUPATIONAL REINFORCER PATTERNS

Borgen, F. H., Weiss, D. J., Tinsley, H. E., Dawis, R. V. and Lofquist, L. H. Occupational reinforcer patterns, Monograph XXIV and The measurement of occupational reinforcer patterns, Monograph XXV. Minnesota Studies in Vocational Rehabilitation, 1968, 48 and 49.

The Theory of Work Adjustment states that the length of time an individual will remain in an occupation depends on his satisfactoriness as a worker and his satisfaction with the job. Satisfactoriness is a function of the correspondence between the individual's abilities and the ability requirements of the job, while satisfaction is a function of the correspondence between his vocational needs and the occupational reinforcers characteristic of the occupation. A variety of research efforts have indicated support for these basic assertions of the theory. Research from a number of sources has resulted in instruments for the measurement of abilities, ability requirements, and vocational needs, but an economical method of measuring the reinforcers characteristic of an occupation had not yet been developed. The major objectives of this research, then, were to develop the methodology for measuring Occupational Reinforcer Patterns (ORPs) and, further, to obtain Occupational Reinforcer Pattern data of practical utility for vocational counseling.

The Minnesota Job Description Questionnaire (MJDQ) was developed to measure the extent to which each of twenty-one previously identified occupational reinforcers was characteristic of an occupation. The method of multiple rank orders, a special case of the general method of pair comparisons, was used to obtain rankings of the relative strength of each reinforcer in an occupation. An absolute statement of "present in the job" or "not present in the job" was obtained so that the rankings of raters for different occupations could be equated for differences between occupations in the "level" of the ORP profile.

One hundred-twenty-five occupations were selected for study by utilizing the following three criteria.

1. The occupation should employ a significant number of persons so that the resulting data will have practical utility.
2. The group of occupations selected should be a representative sample of the first-digit code groups of the Dictionary of Occupational Titles, and
3. As many as possible of the U.S. Employment Service's thirty-six Occupational Aptitude Patterns should be represented.

People working as immediate supervisors of persons holding these occupations were asked to describe the occupations by completing the MJDQ. In all, the ratings of 2,976 supervisors were utilized in developing the eighty-one ORPs presented in the First Volume of Occupational Reinforcer Patterns.

The split-half reliabilities of the ORPs (within occupations) ranged from .78 to .98 with a median of .91. The median correlation between ORPs for different occupations

was .55. This provided strong support for the reliability of ORPs based on groups as small as eleven supervisors. These correlations represent conservative estimates of the reliability since they are "uncorrected" for full sample size.

Several analyses supported the construct validity of the Occupational Reinforcer Patterns. The demonstration that different ORPs were obtained for different occupations is support for a basic premise of the Theory of Work Adjustment that different occupations are characterized by different sets of reinforcers.

At the single scale level, one-way analyses of variance showed that the differences between occupations were highly statistically significant. In other words, the differences between occupations for each scale are likely due to factors other than chance. Omega-squared analyses showed that the Creativity, Social Service, Compensation, Responsibility, and Ability Utilization scales were the best for separating the 81 occupations, while the poorest scales for separating occupations, were Moral Values, Recognition, and Supervision – Human Relations.

The rank ordering of the occupations on each reinforcer scale further demonstrated the construct validity of the ORPs by ordering the occupations in a manner consistent with expectations. For example, the occupations ranking highest on the Social Service scale were airplane stewardess, professional nurse, and school counselor, while the occupations ranking lowest on this scale were assembler (electrical equipment) screw-machine operator, and baker.

At the profile level, a cluster analysis was performed to determine if groups of occupations characterized by similar ORPs could be identified. Nine clusters, containing 59 of the 81 occupations, were identified. The clusters formed an occupational hierarchy. Two clusters contained ORPs for technical-professional and technical semi-professional occupations, one cluster contained ORPs for sales and service occupations, three clusters contained ORPs for service occupations, and the remaining three clusters included ORPs for manual occupations.

The First Volume of Occupational Reinforcer Patterns presents the 81 occupational ORPs and 9 cluster ORPs in a form usable by counselors for vocational counseling. In addition to the statistical presentation of the ORPs, ORP information is presented as graphic profiles to assist in a visual utilization of the information with selected counselees. Each ORP is also translated into a set of verbal statements describing the occupation in terms of those characteristics "highly" and "moderately" descriptive of the occupation. Those occupations with similar ORPs are also identified for each of the 81 occupations. The First Volume also lists occupations in decreasing order of scale value, separately for each of the 21 reinforcers scaled in the MJDQ. Such information can be useful in discussions with clients concerning the relationships between several occupations for a given reinforcer. An introduction to the First Volume further describes the use of Occupational Reinforcer Patterns in vocational counseling.

SOCIO-CULTURAL CORRELATES OF PAIN RESPONSE

Christopherson, V. A., Swartz, F. M. and Miller, B. H. Tucson, Arizona: University of Arizona, 1966.

One of the universal experiences of mankind is the sensation of pain. Some pain is useful in that it warns of disease and injury. Other pain is apparently useless and pernicious; for example, that related to degenerative and neoplastic diseases. The relief of pain is one of the most cherished of all blessings born of modern technology and is a subject of current interest and concern in pain research.

The specific objectives of the study were:

1. To explore pain response in terms of selected socio-cultural factors thought to be associated with variable reactions on the part of individuals whose pain appears comparable in intensity.

2. To describe differences in pain response which appear to be characteristic on the part of Anglo-Americans, Mexican-Americans, and Papago Indians in the Southwest.

The review of literature revealed a long history of concern with pain dating back to the early Greek philosophers. The word "pain" is derived from the Latin *poena* which means punishment. Pain has been classified in many ways. A standard taxonomy of pain is still to be developed. Nonetheless, the classification systems now available have either sufficiently specific or sufficiently descriptive elements to provide useful labels.

Although meager by comparison to the amount of literature dealing with other aspects of pain, there has been a good deal written suggesting that pain is dependent on a number of variables unrelated to tissue damage or physiology. Variables such as the following are thought to be associated with differential reactions to pain: ethnic origin of the subject, previous pain experience, specific cultural attitudes and coping mechanisms, degree of acculturation, isolation, and other variables comparable in nature.

Methodology

Through the cooperation of three major hospitals, the Arthritis Foundation, and the Bureau of Indian Affairs, 290 subjects were obtained. Of these 183 had chronic pain and 107 had pain from recent surgery. These subjects, both Anglo-Americans and Mexican-Americans, were extensively interviewed and administered tests of pain apperception and intelligence. Additional participants were 13 informants for the Papago Indian tribe, 81 physicians who responded to a questionnaire, and 63 healthy men without pain who comprised a control group for the Pain Apperception Test. A total of 452 people participated as informants in some phase of the study.

Results (partial)

The comparison between Anglo-Americans and Mexican-Americans revealed that Mexican-Americans were more inclined to verbalize about pain than Anglo-Americans. The Mexican-Americans also expressed greater satisfaction with medication. The Anglo-Americans evidenced greater ability to ignore pain in social, recreational, and occupational contexts. Anglo-Americans were found to adjust better to chronic pain over the long haul as indicated by social and occupational striving. The Mexican-Americans were more confident than Anglo-Americans that they were better able to bear pain than others with comparable disability.

The intra-group responses varied in terms of education, measured intelligence, and social class. In general the higher the scores in intelligence, education, and social class placement, the better adjusted were the responses to pain.

Post-operative and chronic pain comparisons revealed that post-operative subjects were better satisfied with pain medication and less fearful of pain than were the chronic pain subjects.

The physicians who responded to the questionnaire on pain response indicated a strong belief in the operation of socio-cultural factors as affecting the response. More than half of the 86 indicated that all of the following variables affected pain response: race, ethnic membership, sex, social class, and age. The differences among the physicians' experience and sensitivity to cultural factors, however, served to attenuate the value of their opinions to some extent.

The data bearing on the Papago Indians emphasized the importance of cultural perceptions of pain. Pain was often endured because there was little understanding of the alternatives. A radically different perceptual system of cause and effect was encountered among this group.

Conclusion

The several facets of pain response studied all emphasized socio-cultural conditioning. The implications point toward the necessity on the part of those working with members of various subcultures to understand the pain culture of the group. To view each individual pain response within an idiosyncratic framework alone likely will yield less than optimum results. A knowledge of how socio-cultural factors are associated with pain response should maximize the therapeutic regimen and provide a better basis for necessary rapport between the counselor or professional and the client or patient.

SOCIAL DESIRABILITY AND ATTITUDES TOWARD THE DISABLED

Feinberg, L. B. Personnel and Guidance Journal, 1967, 46 (4), 375-381.

This study examined the relationship between what a person says about the disabled and his need to present himself in a socially favorable light. Various investigations of the attitudes of non-handicapped persons toward the disabled prior to 1967 have yielded inconsistent results. None of these older studies provide a unified theoretical framework under which all factors contributing to the variance in the subjects' attitudes can be considered simultaneously. More specifically, the contribution of the social desirability variable to the total variance is largely overlooked.

The present study related the response patterns of persons with different social desirability needs to several attitude scales under conditions that varied the personally evaluative nature of the testing situation. It was hypothesized that the level of measured attitude toward the disabled would differ significantly between persons having high, medium, and low social desirability needs, between persons who were exposed to high, neutral, or low evaluative test conditions, and between persons having high social desirability needs who are exposed to high evaluative test conditions and persons having high social desirability needs who are exposed to low evaluative test conditions.

A methodological framework based on Adaptation-Level theory was developed since that theory allows for the simultaneous investigation of stimulus, personality, and situational factors. That is, Adaptation-Level theory, interprets attitudes as arising from three sources of variance: (1) the focal stimuli, (2) the background stimuli, and (3) the residual stimuli from past experience. For this study, the focal stimili were three attitude-toward-disability scales differing primarily in terms of degree of test structure along an objective-to-projective continuum. These scales were: Attitude Toward Disabled Persons Test (ATDP), The Granofsky Sentence Completion Test-Orthopedic, and the Granofsky Pictures Test-Modified. Backgound stimuli were varied through high, neutral and low personally evaluative conditions by varying testing instructions. Social desirability need, the residual stimulus, was measured by the Marlowe-Crowne Social Desirability Scale (MC-SD).

The subjects, 280 undergraduate college students, each completed the M-C SD Scale. One third of the *S*s were then exposed to each of the three test instructions (high, medium, or low evaluative). Having received the instructions, all subjects completed the three attitude scales. Students were classified into high, medium, and low social desirability subgroups by dividing each treatment (background stimuli) group at the 33 and 66 percentile on M-C SD scores.

The results of analyses of variance procedures showed a significant difference in the level of measured attitude toward the disabled between persons having high, medium, and low social desirability needs. Subjects having high social desirability needs responded with significantly more positive attitudes toward the disabled than did subjects classified as having low social desirability needs. Secondly, subjects who were exposed to high

evaluative test instructions responded with significantly more positive attitudes toward the disabled on the Sentence Completion Test than did subjects exposed to low evaluative test instructions. Finally, a significant difference on the ATDP and the Sentence Completion Test was found for persons with high SD needs when background stimulation was varied.

Social desirability effects were found on each of the three attitude scales, indicating that their variation was not effective in modifying the influence of social desirability. The lack of significance of background effects on two of the three tests used suggests that the influence of the test instructions was dependent on interaction with the other sources of stimuli present at the time the attitude was measured.

As predicted by the Adaptation-Level model, varying the residual, stimulus, and background factors did result in a modification of expressed attitudes. The results clearly revealed the decisive influence of the social desirability variable (residual) on measured attitudes toward the disabled. This finding is in line with those of numerous studies of the effects of SD on a wide range of personality tests and adds to the growing evidence that SD is a significant factor in attitude measurement.

CASELOAD FEASIBILITY IN AN EXPANDED VOCATIONAL REHABILITATION PROGRAM

Hammond, C. D., Wright, G. N. and Butler, A. J. Wisconsin Studies in Vocational Rehabilitation, Madison, Wisconsin: Regional Rehabilitation Research Institute, 1968, Series 1, Monograph VI.

This study focuses on the measurement and analysis of characteristics thought to be related to the "feasibility" criterion which is required for eligibility for vocational rehabilitation services. Specifically, the purpose of the study was to compare medically-handicapped and culturally-handicapped clients on feasibility-relevant characteristics, in order to determine what effects, if any, might result in client feasibility status if services were extended to culturally-disadvantaged as well as medically-disabled persons.

The client population for the present study was comprised of 85 clients randomly selected from each of the following groups: (1) medically-handicapped clients receiving services in the experimental agency, Wood County, Wisconsin; (2) culturally-handicapped clients receiving services from the Wood County agency; (3) medically-handicapped clients receiving services from the "control" agency, Eau Claire, Wisconsin.

Client data included demographic and personal history information, various achievement and ability test scores, handicap problems data, and counselor ratings of degree of handicap in eight feasibility areas. The various individual variables were then combined by a reciprocal averages method to provide separate feasibility level scale scores for every client in the same eight areas: general, physical, intellectual, emotional, social, economic, motivational, and job skills.

To explore the validity of the resulting scales, counselor ratings in each of the eight feasibility areas were correlated with the parallel feasibility scale scores. The resulting correlations ranged from .13 to .38; five of the eight correlations were significantly greater than zero. Internal consistency reliability coefficients, obtained by Hoyt's analysis of variance method, ranged for the separate scales from .33 (Job Skills) to .86 (General).

Feasibility level scores in each of the eight areas were compared for (1) the medically-disabled clients of the Wood County Agency versus those of Eau Claire County; and (2) the medically-handicapped Wood County clients versus the culturally-handicapped Wood County clients.

The eight comparisons between the medically-handicapped client groups yielded only one significant difference in feasibility scores – on the Economic Area scale, where the control agency (Eau Claire) had the higher mean score, indicating a low economic status and thus a lower feasibility level than the experimental (Wood County) agency.

During the time of the study, the active caseload for the Wood County Project increased from a total of 59 active clients in 1964 just prior to the beginning of the project, to 544 active clients at the end of the project in May, 1967. The number of medically-handicapped clients served by the agency increased approximately six-fold.

This increase, along with the finding above, suggests that many handicapped persons in the population had not been exposed to rehabilitation services but could probably benefit from such services. The comparison of feasibility scores of this expanded medically-disabled group from Wood County with the Eau Claire population, indicating almost no differences on the measured variables, implies that caseload characteristics and feasibility levels might be little changed despite a marked increase in the caseload served.

Four significant differences resulted from the seven comparisons of the feasibility scores of the Wood County medically-handicapped versus culturally-handicapped clients. The mean score on the General Scale was higher (indicating lower feasibility) for the medically-handicapped group than for the culturally-handicapped group. In general, the culturally-handicapped clients were younger and more confident, possessed greater intellectual capabilities, had fewer handicap-related problems, were more aware of their need for training, and were generally of a higher level of rehabilitation feasibility.

In addition, significant differences were found on the emotional, intellectual, and motivational scale scores, with higher feasibility indicated, in all cases, for the culturally-handicapped group. The groups did not differ significantly on the social, economic, or job skills scales.

Major conclusions were summarized by the authors as follows: (1) it is possible to develop a reliable and valid instrument to measure general rehabilitation case feasibility level; (2) rehabilitation services can be extended to a larger number of the medically disabled without reduction of feasibility . . . the culturally-disadvantaged are just as feasible for rehabilitation services as the medically-handicapped; (3) the client group which possessed cultural handicaps to employment was somewhat more feasible than was the medically-handicapped group served by the experimental agency.

Limitations noted by the authors include the fact that the geographic areas studied are relatively isolated from major population centers, and include almost no non-white residents. Thus, the conclusions must be restricted to Caucasian clients who reside outside metropolitan areas. Needs for future research include studies based on more heterogeneous populations, and comparisons of high – and low-scoring clients in relation to outcome criteria, in order to determine the relationships of the various feasibility indices to rehabilitation success.

ACCURACY OF SOCIAL PERCEPTION OF PHYSICALLY HANDICAPPED AND NON-HANDICAPPED PERSONS

Ingwell, R. A., Thoreson, R. M. and Smits, S. J. Journal of Social Psychology, 1967, 72, 107-116.

The ability to understand how others feel about one's self, and the ability to predict whether one is accepted or rejected is important in conducting interpersonal relationships. The ability to predict the other's affective responses toward the self is particularly important to the physically handicapped who often face rejection by the nonhandicapped. Therefore, of interest to rehabilitation counselors is the question of whether handicapped persons can accurately make discriminations between acceptance and rejection, when the handicapped attempt to interact with the nonhandicapped.

This study compared the accuracy of social perception of a group of twelve physically handicapped college females with that of a group of twelve nonhandicapped college females. The groups were equivalent in terms of age, race, and grade-point average.

Social perception was operationally defined as the ability to predict the behavior of another on either the Impersonal Social Perception Scale, or the Social Affectivity Scale. The Impersonal Social Perception Scale was modeled after Dymond's empathy scale. The Social Affectivity Scale was a variation of the relational analysis of Tagiuri.

The following hypotheses were tested:

I. Handicapped college students will be significantly less perceptive in social situations than nonhandicapped college students.

II. Handicapped and nonhandicapped persons will be significantly better able to predict the behaviors of persons belonging to their own groups.

III. Both the handicapped and the nonhandicapped will pick friendship choices more often from the nonhandicapped group than they will from the handicapped group.

The subjects were divided into three groups of eight. Each group consisted of four handicapped and four nonhandicapped subjects. Each of the three groups were independently submitted the same experimental procedures.

The subjects, all of whom were strangers prior to the experimental procedures, were engaged in 90 minutes of formal task-oriented social interaction and 30 minutes of informal social interaction. Following the social interaction periods, the subjects were asked to predict the behaviors of fellow group members on the social perception scales. Each subject was asked to rate all other subjects on the Impersonal Social Perception Scale. This scale has six items. Responses to the items are made using an eight point Likert scale. Each of the items measures one of the following dimensions: superior – inferior, selfish – unselfish, friendly – unfriendly, good leader – good follower, good sense of humor – poor sense of humor, adventurous – cautious. The rating sheets were then collected and new rating sheets were handed out. For the second set the subjects were asked to try to guess how each of the subjects rated themselves on all of the above dimensions.

After the second set of ratings had been filled out and collected, the Social Affectivity Scale was administered with the following instructions:

> If you could continue this relationship of the past two hours beyond the laboratory, I would like you to list on the paper the person you would most like to continue a relationship with, then your second choice, and so on, until in blank seven, you will list the person with whom you would least like to continue a relationship.

Appropriate blanks were handed out. After the blanks had been completed and collected, new blanks were distributed and the subjects were asked to try to guess where each of their fellow subjects ranked them.

Deviation scores were computed by determining the differences between subjects' predictions and the actual responses. Because the assumptions of interval scaling and normality of distribution could not be met the data were analyzed using nonparametric statistical methods.

The impersonal Social Perception Scale failed to separate the groups for Hypotheses I and II, and only the Social Affectivity Scale was used in analyzing the data for Hypothesis III.

Hypothesis I was confirmed in terms of the Social Affectivity scale.

Hypothesis II was confirmed in terms of the nonhandicapped group. Hypothesis II was not confirmed for the handicapped group. Contrary to the hypothesis, the handicapped were significantly more successful at predicting the behaviors of nonhandicapped subjects than they were at predicting the behaviors of members of their own group.

Hypothesis III was confirmed for the nonhandicapped group. The handicapped group also selected friendship choices more often from the nonhandicapped group, but not significantly so.

Results of this study would suggest that the physically handicapped are less socially perceptive than a comparable group of nonhandicapped persons. It has been suggested by the authors that the basis for this conclusion is to be found in the inability of the handicapped to accept the pervasiveness of their rejection. Alternative explanations which were not considered include (a) greater use of perceptual defense, (b) anxiety, (c) social deprivation of the physically handicapped, (d) a blank facade presented by the nonhandicapped, or (e) some combination of the above.

INTERPERSONAL RELATIONSHIPS IN REHABILITATION

Janzen, F. V., Jorgensen, G. Q., MacGuffie, R. A., Israel, D. A., McPhee, W. and Samuelson, C. O. Salt Lake City: Utah Regional Rehabilitation Research Institute, 1968-1969, Bulletins 3, 4 and 5.

These bulletins constitute reports on specific aspects of the core research done at the University of Utah Regional Rehabilitation Research Institute under the general title "Interpersonal Relationships in a Rural Area". The overall effect of the core project was to investigate the effects on the rehabilitation process of the interpersonal relationships between the counselor and his client. The basic assumption was that the quality of the interpersonal relationships between a client and counselor are directly related to the rehabilitation outcome. These bulletins report on different aspects of the core project and although they are within the same general framework they are based on different samples located in varying geographical settings and have a dissimilar focus of specific concern. Nevertheless, in the interests of unity and brevity this summary will include observations from all three bulletins.

The subjects were clients being served by the state rehabilitation agencies in Utah, Colorado, Wyoming, and Montana. The basic instruments used were the *Social Vocabulary Index* which consists of scales intended to measure various aspects of the self concept system and the *Interaction Scale* which was expected to reflect the quality of the interaction between the rehabilitation counselor the client. Other data were collected by means of instruments known as the *Client Case Record Schedule, Counselor Questionnaire, Client Schedule, Client Dependency Scale,* and *Family Member Schedule.*

The essential findings from this series of studies have been considered, discussed, and reported in relation to their importance to the rehabilitation process. They are presented as follows:

Implications for Initiating Services

It is important that the first contact of the client with the rehabilitation agency be positive. The counselor should avoid aloofness, tardiness for interviews, optimism, insincerity, unwarranted interrpution, and a hopeless or pessimistic attitude. The counselor should strive to display a genuine respect for the client as a person worthy of service.

Especially at the time of the initial interview, the counselor should be concerned about how the applicant may perceive him together with the applicant's goals and aspirations. Applicants who contact the state rehabilitation agencies and express a more positive feeling toward the counselor tend to return to the agency and embark on a rehabilitaiton program. Furthermore, since applicants with higher goals and aspirations tend to return for rehabilitation services, those with lower goals have a greater need for the counselor's attention to prevent the client from discontinuing services.

In rural areas, there is a need to make the potential client aware of rehabilitation services sooner than is true elsewhere.

Implications for the Counseling Process

It is likely that good counseling has many of the same basic elements as any good interpersonal relationship. Initially, the counselor should be genuinely warm and accepting and actively reinforce those client behaviors which tend to reduce anxiety. Respect for human dignity, a focus on the client's uniqueness, and unconditional positive regard for him should be maintained. Other agency personnel who have contact with the client can help by expressing similar attitudes.

Counselors should understand and respect the client who expresses divergent values and attitudes. The counselor should attempt to interact actively with clients from other cultural groups, and thus reduce bias which may influence him in overlooking good candidates for services. Certain disadvantaged clients such as welfare recipients or emotionally disabled clients seem to be overlooked because of counselor bias even though they may be feasible for services. Likewise, the lower socio-economic class seems to have a reservoir of potential rehabilitation clients that may not be receiving services at the present time. Specifically, counselors might well try harder to develop a feeling of warmth toward the socially deprived client, for those in the lower socio-economic category or the uneducated.

The counselor's aversion to dependency in male clients may cause him to interact poorly with these clients. Counselors need to be careful not to favor women over men in offering services, for women often seem to receive better help from counselors than men, perhaps because they are more receptive to help.

Counselors should also be aware that clients who are receiving public assistance or workmen's compensation are not likely to seek or accept vocational rehabilitation services unless they can be persuaded that they will gain substantially from so doing.

During counseling, it is good policy for the counselor to remember that a client is influenced by him, and that the likelihood of a beneficial outcome is greater if the counselor knows just what effects he wishes to bring about, and uses sound research findings in trying to attain them.

It may be useful for counselors to note whether a client shows a substantial need for social approval, and use this as one indication of counseling feasibility, for such a need is often predictive of rehabilitation potential. Clients high in social desirability needs tend to view themselves, counselors, and others more favorably than do clients with lower levels of social desirability. The client's need for social approval (social desirability) can be one indication of motivation toward desired rehabilitation goals and of positive client-counselor interaction.

Counselors should make use of the family's influence during the initial planning for the client, as well as involve them in important decisions where possible. Even where a client's family may have a negative influence on him, this information could be helpful in formulating a rehabilitation plan.

It may be helpful for the counselor to investigate the use of rehabilitation aides in rural areas. Aides have been found to increase the positiveness in the relationship as well as to extend the influence of the counselor.

Implications for Job Placement

The quality of the client-counselor relationship may affect the successful placement of the client. It should be noted that in rural areas, as elsewhere, the labor market and opportunities for employment have a profound effect upon the rehabilitation process. When the job market shrinks and employment becomes scarce, the disabled client must develop his potential skills to a higher level to compete successfully.

ATTITUDES TOWARD EDUCATION AND PHYSICALLY HANDICAPPED PERSONS IN ELEVEN NATIONS

Jordan, J. E. Lansing, Michigan: Michigan State University, 1968.

The original research problem was to study cross-culturally the structure, content, and determinants of attitudes toward education and toward physically disabled persons.

The overall research task was conceptualized into three separate but related research problems: (a) attitudes toward education, (b) attitudes toward physically disabled (i.e. handicapped) persons, and (c) the problem of cross-cultural measurement.

Guttman's definition of attitude as "a delimited totality of behavior with respect to something" was accepted as the guiding focus. Thus, principal emphasis of the study was on attitudes, reflecting the belief that only through an awareness of such can action be understood.

A full exploration of the importance of attitudes requires evidence of its structure and determinants at all levels. The position taken in this research was that the facets in Table 1 constitute the necessary (if not sufficient) aspects that must be studied to understand the concept of attitude. The five facets of Table 1 yield 32 possible combinations, and six of these were chosen (Table 2) as being psychologically meaningful and potentially capable of instrumentation. The six were also chosen because of the structure inherent between them; a simplex one

The review of literature indicated that four classes of variables are important determinants of attitudes: (a) demographic factors such as age, sex, and income; (b) socio-psychological factors such as one's value orientation; (c) contact factors such as amount, nature, perceived voluntariness, and enjoyment of the contact; and (d) the knowledge factor, i.e., amount of factual information one has about the attitude object.

Much of the research reviewed was inconclusive or contradictory about the predictor variables, but close examination of the instrumentation revealed that often the so-called attitude scales were of different structures. Thus, one could not expect the predictor variables to behave consistently. For example, there are many studies on the relation between contact or experience and attitude. If the attitude scale was at Level 1 of Table 2, different relationships with contact would be expected than if the attitude scale was at Level 6.

The "culture variable" was extensively reviewed since it presents special measurement problems. Three problems, although not unique to it, are intensified in cross-cultural[1] research: (a) relevancy, (b) equivalency, and (c) comparability. These problems also plagued this research.

It was accepted that "education" and "handicapped persons" were relevant concepts to the respondents of the study and considerable care was taken to achieve

[1]The nations of the study were: Belgium, Colombia, Costa Rica, Denmark, England, France, Holland, Japan, Peru, Yugoslavia, and the United States.

TABLE 1

Comparison of Guttman and Jordan Facet Designations

Designation	Facets in Jordan Adaptation A	B	C	D	E
Jordan	Referent	Referent Behavior	Actor	Actor's intergroup behavior	Domain of actor's behavior
	a_1 others a_2 self	b_1 belief b_2 overt action	c_1 others c_2 self	d_1 comparison d_2 interaction	e_1 symbolic e_2 operational
Guttman	------	Subject's Behavior	Referent	Referent's intergroup behavior	-----
	------	b_1 belief	c_1 subject's group	d_1 comparative	-------
	------	b_2 overt action	c_2 subject himself	d_2 interactive	-------

[1] Based on facets of Table 1.

TABLE 2

Conjoint Level, Profile Composition, and Labels for Six Types of Attitude Struction

Subscale Type-Level	Struction Profile[1]	Descriptive Conjoint[2] Term
1	$a_1 b_1 c_1 d_1 e_1$	Societal stereotype
2	$a_1 b_1 c_1 d_2 e_1$	Societal norm
3	$a_2 b_1 c_1 d_2 e_1$	Personal moral evaluation
4	$a_2 b_1 c_2 d_2 e_1$	Personal hypothetical action
5	$a_2 b_2 c_2 d_2 e_1$	Personal feeling
6	$a_2 b_2 c_2 d_2 e_2$	Personal action

[2] Conjoint struction is operationally defined as the ordered sets of the five facets from low to high (subscript 1's are low) across all five facets simultaneously. Not to be confused with conjoint measurement.

concept equivalence in the translations of the research instruments. Thus, comparability of data units was assumed. In summary, the theoretical stance of the present research fits in the social psychological framework and accepts four classes of variables as determinants of attitudes.

The 17 hypotheses of the study were divided into nine groups. In all but one instance the criterion or dependent variable of attitude is related, by hypothesis, to one of the predictor variables which were regarded as determinants.

Relating Attitudes and Values

The results for this set of hypotheses are not clear but they are suggestive. They suggest that the value orientations in groups become more homogeneous in the more developed nations. Value orientation was also more predictive of attitudes toward disabled persons than it was of attitudes toward education. Perhaps, values are more clearly related to "personal" attitude objects like disabled persons than they are to "conceptual" ones like education.

Relating Attitudes, Values, and Sex

Analysis of the data indicate some relationship between sex and attitude toward the disabled, both within and across nations. However, the relationship is neither strong nor consistent from nation to nation. While this describes the status quo for these variables, there is some evidence to indicate it may be changing.

Relating Attitudes and Contact

The data of the present research contain some interesting implications about the role and function of contact in attitude formation:

1. Amount of contact *per se* is more clearly predictive of attitude intensity when the attitude object is a personal rather than a conceptual one.

2. In general, amount of contact is not predictive of favorable attitudes.

3. Perceived enjoyment and voluntariness of the contact are predictive of attitude favorableness.

Relating Attitudes and Change Orientation

The results support the hypothesis that those who score high on change orientation will be more progressive and less traditional in their attitudes toward education and similarly more positive toward the disabled.

Relating Attitudes and Institutional Satisfaction

The data clearly support the relationship between dissatisfaction with the effectiveness of designated social institutions, such as the schools, labor, business, and the church, and the attitude variables.

Relating Attitudes and Group Membership

It was hypothesized that the SER (special education/rehabilitation) group was the most benevolent, progressive, and change oriented group in our study, since they work in a less structured and newer field of education and social care.

The data generally support the relationship between the groups of the study on attitudes toward the disabled. An interesting summary of the findings regarding group differences might be: In societies with a high standard of living (United States and Denmark) the manager regards the physically disabled person as limiting production, and in all societies the regular teacher regards the disabled or handicapped child as difficult, interfering with, or impeding the information-acquiring process.

Relating Attitudes and Modernization Level

This hypothesis was devised to test the belief that socio-economic-educational development is related to, if not dependent upon, attitudinal orientation.

The data generally support the position that attitudinal or psychological factors are related to modernization. Apparently attitudinal modernity and economic development are at least correlates; the cause-effect relationship is of course open to discussion. The more affluent nations are more positive toward the physically handicapped and are less traditional in their attitudes toward education.

THE EFFECTS OF MOTOR DEVELOPMENT LESSONS ON MENTALLY RETARDED CHILDREN

Lillie, D. L. American Journal of Mental Deficiency, 1967-68, 72, 803-808.

Background of the problem

Motor development is one of the most important areas of development during the early years of life for several reasons. In early childhood, mental and physical activities are closely related, and motor activities appear to play a major role in intellectual development. To a large extent, so-called higher forms of behavior develop out of, and have their roots in, motor learning. This assumption is supported by the organismic development theory which proposes that the sensory-motor performance of children is related to factors which are highly related to the early environmental experiences of the individual. When a child first enters school, certain degrees of motor ability are assumed to be present. Under normal conditions the child can be expected to develop these abilities to a learning readiness level before he enters school. However, when conditions are not normal, as when the environment is inadequate, these assumed abilities may not be developed. Since later learning is based in a large degree upon the earlier learning, such a child finds himself in ever-increasing difficulty as his school experience continues.

Some of the most important developmental tasks of the preschool and early school years consist of the development of motor skills based on the coordinated use of different teams of muscles. Society expects the child to measure up to its normative expectations, and fail to include the deprived child. The child who falls below social expectations may develop feelings of personal inadequacy which weaken his motivation to try to learn. Not only will a child's lack of motor development affect his self-concept and hence his personality, but his personality and lack of motivation will inhibit future motor development.

Although there has been an abundance of investigations of the relationships between motor functioning and academic achievement, as well as between motor functioning and intellectual development, there has been very little attempt to investigate the effects of motor training on motor proficiency level. Hence, before an attempt can be made to determine a causal relationship between early sensory-motor training and intellectual development or academic achievement, it first must be established that a causal relationship exists between motor training and motor proficiency.

Purpose

It was the purpose of this investigation to determine the effects of a diagnostically based motor development program on the motor proficiency of mentally retarded, culturally deprived children of preschool age.

Research procedures

In order to determine the effects that motor development lessons have on motor proficiency, the following three groups of approximately 16 children each were constituted:

1. The experimental preschool group (EPS) was composed of children enrolled in the experimental preschool project at the Indiana University Laboratory School who received the motor development lessons.

2. The kindergarten control group (KC) contained children who were enrolled in a kindergarten class in Edinburg, Indiana, and who received a general kindergarten curriculum which included general motor development experience.

3. The home control group (HC) was composed of children who were not enrolled in school and who resided in Shelbyville, Martinsville, or Bloomington, Indiana.

The Edinburg kindergarten group provided control for the possibility of Hawthorne effects. The EPS group and the KC group were under the direction of qualified female teachers assisted by inexperienced, unlicensed male teacher aides.

There was no attempt to draw a random sample of subjects because of the limited number of mentally retarded, culturally deprived children of preschool age in the Bloomington area. The children in all three groups were selected by the following criteria:

1. The subjects' chronological ages ranged from 57 months to 70 months. All children had to be eligible for first grade entrance in September of the following year.

2. The subjects ranged in I.Q. from 50 to 85 as measured by the Stanford-Binet Intelligence Scale, form L-M.

3. Parents of the subjects fell in either the lower or lower-lower class range as measured by the Warner Meeker Eells Index of Status Characteristics.

4. Limited intellectual development was nonorganic in nature.

5. The subjects were free from any type of physical or sensory handicap, as ascertained through a medical examination, which would limit participation in the school program.

6. Upon psychiatric examination the subjects did not display behavioral evidence of serious emotional maladjustment.

The Lincoln-Oseretsky Motor Development Scale was selected as a pre- and post-measure of motor proficiency because it is considered to be one of the best instruments of its type available and because it has been used more frequently than any other instrument for measuring motor proficiency. In that the Lincoln-Oseretsky provides only a total raw score, gross-motor and fine-motor proficiency scores were obtained by categorizing each item in the test on the basis of previously conducted studies in which motor development tasks had been factor analyzed. Items which contained a majority of gross-motor factors were included in computing the gross-motor proficiency score. Items which contained a majority of fine motor factors were included in computing the fine-motor score.

The treatment variable for the EPS group consisted of a series of 65 diagnostically based motor development lessons. The lessons were developed by the investigator, based on the analysis of the Lincoln-Oseretsky pre-test profiles, Guilford's factor analysis of motor skills, and ability to perform previous motor development lessons.

The lessons were developed approximately a week in advance of presentation in the classroom, so that the investigator could incorporate the knowledge of the subject's performance on previous lessons into future lessons. Lessons for the oncoming week were given to the EPS teacher and teacher's aide on the previous Thursday or Friday. At that time the investigator discussed the lessons with the teacher and teacher's aide so that the

procedure was fully understood. During the treatment period, the investigator consulted with the teacher regularly to provide a diagnostic basis for the development of the lessons which followed.

The motor development lessons were designed to remediate motor weaknesses of the subjects based on gross- and fine-motor factors as identified by Guilford. Gross-motor factors were static balance, dynamic precision, gross-body coordination, and flexibility. Fine-motor factors were finger speed, arm steadiness, arm and hand precision, and hand and finger dexterity.

The treatment variable for the kindergarten control subjects consisted of a typical kindergarten curriculum, including such general areas of instruction as socialization, communication skills, and school readiness activities. There was no established period during the day for motor development lessons *per se.* However, motor experiences which are traditionally used in kindergarten programs were provided. These activities included running games, working jig-saw puzzles, bead-stringing, coloring, cutting, some beginning writing exercises, drawing, clay modeling, and other similar activities.

The home control subjects received no formal instruction, and it is assumed that they were engaged in such motor activities as free play in the neighborhood and home. As discussed previously, it has been theorized that the subjects remaining at home without the benefit of a school program, would be engaged in very few of the school readiness activities mentioned above.

Findings

Because of significant pre-treatment differences between groups on Lincoln-Oseretsky scores and chronological ages, analysis of covariance was employed in analyzing the data.

Analysis of the post-test results indicated that there were no significant differences in gross-motor proficiency among the three treatment groups, even though the two school groups had a regularly scheduled physical education period each day. It was, therefore, suggested that physical education programs should be structured more toward the development of specific gross-motor factors. It is also possible that children at home, in a permissive atmosphere, participate in more gross-motor activities throughout the day than do children in a structured school program.

Further analysis of the data indicated a post-treatment significant difference in fine-motor proficiency among all three groups at the .05 level of confidence. Fine-motor proficiency of the experimental group was significantly higher than the fine-motor proficiency of the kindergarten group, which in turn was significantly higher than the fine-motor proficiency of the at-home group.

Possible influencing factors were presented and discussed. Teacher differences, Hawthorne effect, experimental bias, and motor development due to other curriculum factors did not significantly affect the outcome of the investigation. Therefore, it was concluded that the significant differences in fine-motor proficiency were primarily produced by the experimental motor development lesssons.

The results of this investigation point out the need for a structured fine-motor development program for preschool culturally deprived children. Such a program must be

based on developing the specific fine-motor factors which are known to exist. The program must be planned to include the motivational and sequential aspects of motor development. A sequence of fine-motor development lessons, as developed for the treatment in this study, would be very useful in increasing the teacher effectiveness in developing fine-motor proficiency.

CLIENT-COUNSELOR COMPATIBILITY AND THE OUTCOME OF COUNSELING

Mendelsohn, G. A. and Rankin, N. O. Journal of Abnormal Psychology, 1969, 74 (2), 157-163.

This study proceeds from the assumption that a systematic, empirically derived procedure for matching clients and counselors offers a practicable way to improve counseling effectiveness. In a previous study, Sapolsky (1965) found that patient-therapist compatibility, as measured by Schutz's FIRO-B scale, was related to positive therapy outcomes. FIRO-B is a useful test in that its dimensions are directly concerned with interpersonal behavior and the test is specifically designed for use in studies of dyadic and group interaction. Although Sapolsky's work has some serious sampling and methodological limitations, it seems encouraging as a validation of a potentially useful test and as an empirical confirmation of the matching assumption. The present investigation likewise examined the effects of compatibility but in a clinical setting and by an analytic approach quite different from the earlier work.

Subjects were 115 clients, 73 males and 42 females, who had come for the first time to the Counseling Center seeking assistance with vocational, educational, and personal problems. There were 11 counselors, 6 males and 5 females, most of whom had at least 2 years of counseling experience. Prior to the first interview, both clients and counselors took the FIRO-B and at termination, the clients completed an outcome questionnaire. This 27-item questionnaire yielded five stable clusters of items, but a single general evaluation factor was obtained to serve as the major outcome variable. It reflects the client's degree of satisfaction with counseling and the counselor, his evaluations of the relationship and the extent to which he achieved his counseling objectives.

FIRO-B provides scores in three interpersonal need areas, Inclusion, Control and Affection, and Schutz defines three forms of compatibility. There are thus nine compatibility scores and in addition the sum of these scores, K, a measure of global compatibility. The latter was used by Sapolsky in his research. There are several problems inherent in the use of matching scores of any kind and particularly in the use of composite scores like K. Briefly, matching scores are a function of the separate scores from which they are derived. Thus, results attributed to matching may in fact be due to these separate scores and not to their combination or interaction. In addition, when several matching scores are combined into a composite, the possibility that the components may predict the criterion differentially is obscured. Consequently, in the data analysis, the composite K, each of the nine compatibility scores, and the separate client and counselor scores from which compatibility is derived were all correlated with the criterion. Since sex differences in social behavior are well established, the correlations were calculated separately for males and females.

Five of the correlations between the separate compatibility scores and the measure of general evaluation were significant for females ($r = .30 - .35$), but none was significant

for males. The global compatibility score, K, did not produce a significant correlation for either sex. This failure occurred because the compatibility scores which comprise K did not all correlate with the criterion in the same direction, and thus, when combined, canceled each other's effects. Generally, compatibility in Control was associated with favorable outcomes. However, in the affective need areas, Inclusion and Affection, compatibility was associated with unfavorable outcomes. Subsequent analyses largely ruled out the possibility that the compatibility results were a function of the separate client or counselor scores.

Although K failed as a predicator in this study, the possibility that some other composite would be of value was investigated for the females. A new composite was formed by weighting the separate compatibility scores +1 or -1 in line with the direction of correlation with the criterion, and then summing. This composite correlated .50 with the criterion, a substantial improvement on the prediction from the best single component. Evidence here, too, indicated that the effects of compatibility were independent of the client or counselor scores per se. It must be noted that this composite was formed a posteriori and so demonstrated only that a composite *can* improve prediction, while leaving open the question of the stability of this particular composite.

The results indicate that compatibility as measured by FIRO-B is a useful predictor of counseling outcome for females. Most studies in clinical and counseling psychology fail to consider the potential effects of sex differences. In light of both the present findings and previous literature, this is a serious omission – there is little reason to believe that the determinants of social behavior are the same for males and females. The negative correlation between compatibility in the affective need areas and outcome suggests that conditions which generally encourage closeness and interpersonal attraction can have a deleterious effect on the very special relationship inherent in counseling. The notion that the direction of counseling should be mutually controlled is, on the other hand, confirmed. Finally, the underlying assumption of the study, that explicit, validated matching procedures can potentially facilitate effective counseling received encouraging support.

CEREBRAL PALSIED STUDIES – THEIR EDUCATION AND EMPLOYMENT.

Muthard, J. E. and Hutchison, J. H., Gainesville, Florida: University of Florida, 1968.

This study was designed to provide guidelines for individuals concerned with counseling college students who have cerebral palsy (CPCS) and to assist cerebral palsied youth in making sound decisions concerning the rehabilitative value of higher education. The problems and barriers confronting this group were thoroughly investigated. Extensive data on CPCS attitudes, needs, academic successes and adjustment during pre-college years were obtained and related to post-college vocational and personal adjustment. Investigations provided information concerning: the nature of pre-college, educational, and employment experiences; the extent to which experiences during college were beneficial; how the student felt about his college education and employment experiences; and how college influenced the student's ability to secure suitable employment.

Three major approaches were followed in conducting this research.

1. The responses of cerebral palsied college students were tabulated to secure normative data or permit comparisons with findings from other college student groups.

2. Personal, educational and vocational characteristics of cerebral palsied college students were compared with non-impaired (NI) students.

3. Personal, educational and vocational characteristics of cerebral palsied college students employed in jobs related to education were compared with those employed in jobs not related to education.

Only persons enrolled in college in 1959-60 or during the preceding three years were included in the study. A register of 353 CPCS was compiled to secure a sample for this research. Of the 158 respondents to a preliminary questionnaire, 80 individuals, located within easily accessible geographical location in the Midwest and Middle Atlantic regions, were chosen to comprise the representative sample. This group of 50 men and 30 women was intensively studied.

In the follow-up study conducted by mail questionnaires, 117 of the original group of potential subjects submitted inventories. Data were obtained from a sample of non-impaired college students for comparison in both the earlier and follow-up studies.

The concerns and attitudes of cerebral palsied students towards a college education are much like those of non-impaired students. The two groups were similar in age, type of home community and in post-college income and estate value.

Individual differences among college-going CP's are great and counselors and parents must carefully consider the individual capacities and personalities of the cerebral palsied students involved. Not all CP students need intensive and protracted counseling nor do they all face skill and coping problems as students.

Cerebral palsied persons who have the intellectual and physical capacity to attend college can successfully matriculate. However, some will find it to their advantage to apply for admission to a number of schools and to be persistent in their efforts to enter

college. At the time of the initial survey, a large number of private and state colleges admitted cerebral palsied students.

As a group, the CPCS differed in some ways from the non-impaired students. Most CPCS had attended large public schools, and did not do as well academically as the non-impaired and were more likely to have a hiatus between high school and college. The CP youth's educational program lagged at all points. He required more time to complete both undergraduate and graduate study programs than did the non-impaired students, and appeared to progress more slowly in his career. The curricula followed were limited only by the barriers imposed by the individual's impaired communication skills and mobility.

CPCS need to develop a wide range of novel techniques for coping with basic skills required of college students such as notetaking, preparing for and taking examinations, preparing reports, and doing laboratory work.

CP college students do not differ from the NI group in the types of professional workers or other people they seek assistance from, but they do make a greater use of counseling and guidance services and seek help from a broader range of counseling resources. The most helpful traits of counselors, according to CPCS were interest in the student as a person and ability to provide information.

One out of eight CPCS reported difficulty in moving about campus and one in six reported they felt dependent on others to some degree. A majority felt their disability influenced attitudes of other students; e.g., about one-half expressed the uncertainities of classmates as "they think I can do things I can't," or "they think I can't do things I can." About half experienced rejection, or stated they were treated with too much sympathy and pity.

In general, the CPCS felt satisfied with the help received from teachers and the college admission staff. They tended to be somewhat more positive about the values of college and less critical of their teachers than their non-impaired peers.

The CP has a greater concern for the vocational value of his education, than does the non-impaired student.

Prior to and during college, the CPCS had fewer exploratory work situations than did his non-impaired peers, held fewer regular jobs and was less frequently employed. A relatively high proportion of the CPCS expressed satisfaction with summer jobs as possible future employment sources.

If employment is to be considered the criterion for successful rehabilitation of the cerebral palsied, completion of a college education then becomes a major asset. In the follow-up study only four percent of the cerebral palsied college students were unemployed, while about 70 percent of adult CP's in general, are unemployed.

When salaries received by the NI and CP groups were compared, it was found that CPCS received substantially less for their efforts than the non-impaired.

Although this study did not categorically prove that a vocationally oriented college education is the most useful course for the CP to pursue, it indicated that those cerebral palsied college students who did pursue such a course were (a) more often employed in work similar to their training, (b) liked their work more than those who completed non-vocational curricula, (c) had generally fewer adjustment problems and (d) generally had higher salaries.

A FOLLOW-UP COUNSELING PROGRAM: A STUDY OF THE INFLUENCE OF CONTINUED COUNSELING ON THE EMPLOYABILITY OF DISABLED WORKSHOP TRAINEES

Neff, W. S., Novick, B. and Stern, B. New York, N. Y.: Jewish Occupational Council, 1968.

This is a summary of the Final Report of a three year study of the influence of a follow-up counseling program on disabled workshop trainees. The project was carried on at ten Jewish Vocational Service Agencies throughout the country and was developed and coordinated by the Jewish Occupational Council (JOC).

The primary objectives were:

1. to determine whether intensive counseling, provided for an extended period after workshop service was completed, would help clients to maintain employment.

2. to identify the characteristics of those clients who appear to require the continuation of professional services beyond training in a rehabilitation workshop.

Specific aims were:

1. to examine the difference between the employment status of those provided with intensive follow-up counseling services and those not provided such services.

2. to look for critical periods when clients may need assistance in maintaining employment.

3. to discover whether there is an optimum period for continuing services, and whether this period differs among the four disability groups included in the program.

4. to explore the differences in the types of problems encountered and therefore in the types of services required.

GENERAL PROCEDURE

Research Design

Each Jewish vocational service agency provided intensive and continued service to a caseload of Experimental clients and performed a follow-up study of the employment status of a corresponding control group.

Assignment of clients was made on a random basis in order to make the groups substantially comparable on such variables as age, sex, previous employment, etc. At the time of acceptance into the workshop, clients were designated A and B on a consecutive basis. At the completion of the workshop stay, those designated A who met the eligibility requirements were selected for the Experimental group and those designated B who met the eligibility requirements were selected for the Control group. The same procedure was followed for those clients who had left the workshop.

Clients in both groups were selected from among four disability groups – the mentally retarded, the emotionally disturbed, the physically handicapped and the disabled aged (55 and over). These subjects had completed a substantial workshop experience of at least 4 weeks, were deemed ready to enter the unprotected labor market, were 17 years or older, and had been out of the workshop less than 6 months.

THE SAMPLE

The total sample consisted of 523 clients; 307 Experimentals and 216 Controls. Men outnumbered women (males 61%, females 39%). Subjects in the sample averaged approximately 35 years in age, with two-thirds falling between 20 and 50. They had achieved about 9 years of formal education, with the central two-thirds ranging from about the 5th through the 12th grade. Two-thirds of the sample was single. The emotionally disturbed accounted for 50% of all clients, the physically disabled 28% and the mentally retarded 21%. There were 74 disabled-aged clients in the total sample, the majority of whom were physically disabled.

Less than three-quarters were in the labor market at the time of referral to the JVS agencies and the average amount of unemployment was between 12 and 15 months prior to referral.

Statistical Treatment

Multiple regression techniques were used to examine the relations of three chief outcome variables and the characteristics of experimental and control subjects. In addition, typical case histories were collected and analyzed.

The Counseling Program

From one year to two and a half years of follow-up counseling was provided to experimental clients, focusing on those problems which appeared to be negative influences on employment maintenance. Basic services included individual counseling, special placement efforts as needed, job development with an emphasis on employer involvement in the job adjustment of the client, referral to and continuing contact with medical, casework, psychological, psychiatric and any other services which were required. Group counseling programs were available at some of the agencies.

Cases were kept open for the entire project-period, thus permitting the resumption of services for clients who were temporarily unavailable for employment due to hospitalization, short periods of skill training, or additional workshop adjustment training. Although the original plan called for a minimum of one counseling interview

every two weeks, the program was arranged to permit a flexible and individualized approach to each client.

During the second year of the program, a study was undertaken to explore the kinds of problems which interfered with job adjustment, as well as how these were handled by counselors and when intervention seemed most needed.

RESULTS

1. Within the framework of a high level of successful rehabilitation for the entire sample, post-workshop counseling resulted in modest, but statistically significant, differences on three maintenance-of-employment indices between experimentals and controls. Clients who received extended counseling services worked a larger percentage of the elapsed time, were placed in employment in relatively large numbers, and a larger proportion were found in employment at the end of the follow-up period of 12 months.

2. There were interesting differences among the disability groups. The severely emotionally disturbed appeared to show the largest benefits with the physically disabled and the mentally retarded showing a somewhat less strong, but positive, effect from the counseling process. The disabled-aged group was too small to be treated separately in the quantitative analysis. The general findings indicate that, on the whole,, the older the client, the less favorable the vocational outcome. Nevertheless, the older clients in the experimental group did relatively better than the older clients in the control group, suggesting that aged clients can also benefit from the counseling program.

3. Initial counselor estimates of the client's general health and his motivation for work accounted for some of the variance in outcome. Those who were perceived as strongly motivated for work and whose general health was seen as adequate profited more from follow-up counseling. On the other hand, counselor estimates of potential placeability and potential maintenance of employment were not efficient predictors of vocational outcome, nor was previous employment experience.

4. An important finding was that early job placement was a powerful determiner of vocational outcome. Clients who were placed while still in the workshop or shortly thereafter were more successful in maintaining employment than those who did not begin working immediately.

CONCLUSIONS AND RECOMMENDATIONS

1. The rehabilitation process cannot be considered complete merely in terms of a specified rehabilitation service, but should include various procedures which will facilitate transition to the world of work. The results suggest that, for many clients, entry to employment is a process rather than a single act and many clients will need continued support for an extended period of time.

2. Placement procedures should be built into a workshop program so that this process begins while the client is still undergoing work adjustment training.

3. Follow-up counseling services should be considered as the final phase of a work adjustment program.

4. Counseling services should be available for at least a six month period beyond the completion of the work adjustment training phase and then re-evaluated in regard to the need for further continuing service.

5. Since there are indications that involvement of a parent or a spouse in the counseling process can contribute to vocational adjustment, this should be considered in planning a program.

6. An effective placement program should focus on individualized job development, with attention to the role of the employer in the job-adjustment of the client.

7. To be effective, rehabilitation counseling should be coordinated within a broad constellation of other services bearing on family organization, living arrangements, medical and psychiatric treatment, and the like.

8. In view of the complex problems presented by a severely disabled population, it would seem essential that experienced and well trained rehabilitation counselors be utilized.

TRAINING THE PRE-SCHOOL RETARDED CHILD IN FOCUSING ATTENTION: A PROGRAM FOR PARENTS

Santostefano, S. and Stayton, S. American Journal of Orthopsychiatry, 1967, 37, 732-743.

While concerned with assessing the effects of enriching the environment of retardates, this study differed from earlier studies in three important respects. It attempted to train a specific aspect of cognitive functioning, to explore whether cognitive training by mothers represents a unique form of nurture for retardates, and to employ measures of "learning potential" rather than the more general IQ score, as a way of assessing the effects of training. The specific questions raised were: Does training in the developmentally early cognitive function of focal attention generalize to, and promote the growth of, higher functions which subsume focal attention? Does training by mother render the retardate's cognition more plastic; that is, increase the child's capacity to assimilate and to use instruction provided by others?

Cognitive controls and the genetic point of view. The first of these questions derives from cognitive control theory which conceptualizes several ego strategies individuals use to process information in order to achieve adaptation. Observations by us and others suggested that retardates are particularly deficient in one of these strategies or controls, namely focal attention, which is presumed to represent one of the first cognitive functions organized in development. Focal attention involves engaging an object actively with one's attention over a sufficient period of time so that its unique properties are observed and comprehended. The implication of this deficiency for the education of retardates takes on particular importance if viewed in terms of the genetic point of view which holds that early forms of behavior are not replaced during the process of development. Rather, they become subordinated by and integrated with higher forms, and, therefore, remain active, co-determining all subsequent structures which develop.

With these theoretical considerations as a basis, it was hypothesized that training in focal attention would result in advancing the efficiency of higher cognitive functions (e.g., categorizing, directionality, concept formation, and imitating).

The use of mothers as trainers. Devising a training program mothers can administer at home could help reduce the shortage of manpower available to train mental retardates, and at the same time, enable mothers to gain a greater sense of participation in rearing their children. We also speculated that if maternal nurture specifically reinforced the child's active exploration of the environment, then the extent to which the retarded child used guidance provided by others would be enhanced.

Subjects were severely to moderately retarded children attending a state nursery school program. Experimentals: 17 boys; 14 girls; 3.5 to 7.8 years old; mean IQ, 54. Controls: 16 boys, 16 girls; 3.9 to 7.3 years old; mean IQ, 50.

Procedure. Parents in the experimental group received training materials and were instructed to administer a program to their children at home five days a week, 10 to 20 minutes each session, for four months. Supervision was provided the mothers in group meetings. The children were evaluated before and at the close of home training. Controls were evaluated before and after a four month period.

Training Program in Focal Attention: The program consisted of 22 main "lessons" representing a progressive increase in complexity of information presented the child. With each lesson a prescribed display of cutouts (e.g., squares, circles, triangles) was placed on a board by mother, and the child was to remove particular ones. It was assumed that with each display the child was required to deploy his attention actively over a delineated stimulus field. Mothers were instructed to use demonstration, physical guidance, and appropriate verbalization in order to convey to the child what was expected of him. When the child completed the requirements of a lesson, he proceeded to the next.

Criterion Tests: To assess the effects of training, tests were adapted from the literature and devised to meet these general requirements: no verbal response by the child is necessary; items could be administered by demonstration and pantomime; only acromatic materials be used because of possible difficulty in color perception. In addition, each test included coaching trials in its administration. If a child's first attempt to deal with an item fell below a predetermined level of performance, the examiner coached the child through a correct response. The item was then readministered. The criterion tests were: (1) Maze-Trail Test – drawing a line through a maze, presumed to assess directionality; (2) Picture Discrimination Test – matching pictures of common objects, presumed to assess discrimination, matching, and searching behavior; (3) Buttons Test – sorting white, black, and gray buttons, presumed to assess categorizing behavior; (4) Object Sort Test – grouping cutouts according to shape or color, presumed to assess concept formation; (5) Arm Movement Imitation Test – imitating arm movements of the examiner, presumed to assess body image and imitating.

Results. Before home training was initiated, the two groups of children did not differ with respect to general intelligence, age, and level of efficiency in handling the criterion tests. After home training the experimentals, when compared with controls, showed significant improvement with all tests except the body imitation test. As for the question of change in cognitive efficiency due to coaching, before training was initiated experimental and control children showed no difference in their need for and capacity to make use of coaching by the examiner. In terms of predetermined levels of acceptable performance, both groups required coaching with a mean of 7 items and both showed subsequent improvement with 50% of these. However, after training, experimentals required significantly less coaching (a mean of 5 items versus a mean of 9 for the controls) and showed significantly more improvement following coaching (63% versus 45% for controls).

Material obtained from the parents during supervisory meetings and from their daily diaries suggested several themes. Some mothers felt stressed while training their child and wondered if another family member could conduct the training. This request lead parents to clearer understanding of the difficulty they experienced making demands, setting limits and disciplining their retarded child. In general, as they gained experience

administering the program, mothers' observations of their children's daily behavior became more articulate and empathic.

The results of the study were viewed as supporting the assumption that training in the developmentally early cognitive function of focal attention generalizes to and promotes the effectiveness of higher functions and that such training by mothers renders the child's cognition more accessible to instruction by others. The results also suggested that the benefits which a retardate can derive from instruction and information provided by the typical classroom may be restricted to some degree by his deficient focal attention and that professional workers might consider exploring ways to improve the child's ability to attend as well as providing him with educational stimulation. The finding that the learning potential of retardates can be altered contributes to a growing point of view which challenges the initial and still influential conceptualization that retardation means organismic arrest.

A DESCRIPTIVE STUDY OF SUPERVISORY PRACTICES AS PERCEIVED BY COUNSELORS IN STATE VOCATIONAL REHABILITATION AGENCIES

Smits, S. J. and Aiken, W. J. Bloomington, Indiana: Indiana University, 1969.

Background

While time, money, energy and attention have been focused on the rehabilitation counselor, relatively little concern has been shown regarding his supervisor. Yet it is the supervisor who motivates and directs the counselor's activity by: (a) contributing to the educational and professional growth of his counselors, (b) contributing to staff morale, (c) encouraging counselor productivity, (d) reviewing counselor-client activities, (e) stimulating and organizing agency and community resources, and by (f) interpreting agency standards and policy to the counselor.

In short, if the counselor is the direct link between the agency and the client, the supervisor is the direct link between the counselor and the agency. This project was a descriptive, hypothesis-generating study which sought to answer two questions: (1) How do counselors in State Vocational Rehabilitation Agencies describe the behavior of their supervisors in terms of leadership characteristics, interpersonal relationships, and areas of competency? (2) Is there a significant relationship between counselor descriptions of supervisory behavior and counselor job satisfaction?

Related Research

Industrial research provided several important observations and hypotheses: (1) Leader behavior appears to be a function of the interpersonal values of the leader, (2) Higher levels of consideration seem to relate to a more pleasant work environment, but seem unrelated to production, (3) Large organizations seem to require uniform behavior in order to achieve efficiency, thereby reducing worker autonomy with a subsequent reduction of his emotional involvement in his work, (4) Job satisfaction and dissatisfaction are multidimensional measures composed of boh intrinsic and extrinsic factors, (5) Intrinsic factors are stronger determinants of satisfaction, or dissatisfaction, among white-collar workers, and (6) There is some evidence and conjecture to suggest a relationship between attitudes toward supervisory behavior and job satisfaction. However, it is difficult to apply the industrial results because rehabilitation differs from industry in at least two essential ways: Rehabilitation, as defined in this study is a governmental rather than free enterprise activity; and production and quality criteria are more clearly defined in industry.

Methodology

Five research instruments were mailed to a random sample of counselors in 31 cooperating agencies. Completed instruments were returned by 230 counselors (67%). Measures of leader behavior obtained from the *Leader Behavior Description*

Questionnaire-Form XII (LBDQ) and the *Relationship Inventory* were used as predictors and related to scores on the *Job Satisfaction Inventory* (JSI). The effects of sex, age, professional preparation, agency size, agency location, and several time-on-the-job factors were also assessed.

Results

Regarding the description of supervisory behavior, the results from the LBDQ indicate that counselors see their supervisors' leadership behavior as more characteristic of "tolerance of freedom" and "consideration" than of "initiation of structure" and "production emphasis." In terms of interpersonal relationships, supervisors are seen as responding to the counselors with a comparatively high "level of regard" which, however, is not entirely unconditional. The area in which supervisors were seen as inadequate by the largest proportion of counselors (35%) on the *Inservice Training Needs of Supervisors Questionnaire* was the "Ability to handle interpersonal relationships in administrative settings, directing, motivating and stimulating staff performance." Sixty-two of the 81 correlation coefficients showing the relationship between counselor perceptions of supervisory behavior and counselor job satisfaction were significantly different from zero at or beyond the .001 level of confidence. "Production emphasis" as a supervisory behavior was not significantly related to any of the eight dimensions of counselor job satisfaction.

Research Implications

The enormity of the budget and the social and humanitarian importance of the rehabilitation effort would seem to justify research efforts aimed at identifying and minimizing the constraints and maximizing the incentives in State Rehabilitation Agencies. Productivity is important in rehabilitation settings as well as in industry. Yet the process of producing is quite different in the two settings. Rehabilitation outcomes would seem to be more dependent upon the interpersonal interaction of the counselor and his client, whereas the more impersonal process in industry is often less dependent upon interpersonal considerations. Job dissatisfaction may have a more detrimental effect on interpersonal behavior than on eye-hand coordination. First, and foremost, research is needed to determine the relationships among measures of supervisory behavior, counselor job satisfaction, and case service outcomes. Secondly, research is needed to determine the relationships among measures of supervisory behavior, counselor job satisfaction, and counselor turnover. Research could also contribute to the isolation of those interpersonal values most likely to be associated with appropriate leader behavior, and subsequently to the identification of persons for supervisory positions. The whole area of supervision in state rehabilitation agencies needs a longitudinal, in-depth study designed to pinpoint an appropriate set of supervisory responsibilities and to devise adequate tools and techniques for its implementation.

ADOLESCENT SYMPTOMATOLOGY

Spivack, G. and Spotts, J. American Journal of Mental Deficiency, 1967-68, 72, 74-95.

The purpose of this study was to develop a practical tool that would reliably measure significant dimensions of overt symptom behaviors of disturbed adolescents, symptoms that interfere with adequate personal and social adjustment. To fulfill this purpose, it was necessary to assess numerous maladaptive adolescent behaviors to determine how they relate to each other and are patterned, to examine their occurrence among many hundreds of emotionally disturbed, retarded and normal teenagers, and to turn this knowledge into a measuring device for professional and semi-professional workers concerned with treatment, rehabilitation and research.

Out of a series of factor analytic, beta and multivariate analyses, a set of 13 behavior "factor" and four behavior "cluster" dimensions emerged. For each dimension a measure of factor reliability or homogeneity was determined, as well as the relationships with such variables as age, sex, IQ, and clinical diagnoses. Finally, the factors and clusters were analyzed to determine supraordinate groupings. All of these findings were related to and compared with similar data of the principal investigator previously obtained with latency age children, and the research of others with adult psychiatric patients.

Factors emerging were labeled *Unethical Behavior* (absence of internalized codes of ethical social conduct), *Poor Emotional Control* (proneness to upset and emotional outbursts), *Defiant-Resistive* (resistance to adult intervention and negation of adult wishes), *Dominating-Sadistic* (aggressive with peers), *Heterosexual Interest* (behavior and concern with peers of opposite sex), *Need Approval, Dependency* (movement toward adults to gain support), *Physical Inferiority-Timidity* (physical insufficiency and social reticence), *Negative Identity* (rejection of external standards), *Hyperactive-Expansive* (level of activity and expansiveness of mood), *Untidy-Uncleanly* (obliviousness and inner preoccupation), *Poor Coordination* (poor gross and fine motor coordination), *Incontinence* (bladder and bowel control), *Poor Self-Care* (independence in self-care), *Emotional Detachment* (lack of emotional response to others), *Bizarreness – Cognition* (aberrant thoughts), *Bizarreness – Action* (aberrant acts), and *Anxious Self-Blame* (worry, overconcern, and self-blaming). The four clusters measured amount of persecutory feelings, paranoid thinking, distractibility, and inability to delay and control tension discharge.

The scales, developed out of these data, can be used by any professional, semi-professional, parent or parent surrogate in describing the behavior of a teenager they know well. The resulting behavior profile may be used as a means of communication, as a means of comparing the behavior patterns of different children, as a means of creating homogeneous behavioral groups, as a measurement devise to assess behavioral change as a function of treatment intervention, or as the basis for therapeutic planning and intervention.

THE MEASUREMENT OF ATTITUDES TOWARD DISABLED PERSONS

Yuker, H. E., Block, J. R. and Young, J. H. Albertson, N. Y.: Human Resources Center, 1967.

The Attitude Toward Disabled Persons Scale (ATDP) is a Likert type attitude scale that was designed to measure how disabled persons are perceived. More specifically, responses to the items reflect the degree to which disabled persons are perceived as similar to or different from non-disabled persons. A relatively high score is interpreted as indicating that the respondent perceives disabled persons as similar to non-disabled persons, whereas a score that is low indicates that disabled persons are perceived as different. Since many of the items on the ATDP suggest that differences have negative connotations, a score may be interpreted as reflecting that the respondent perceives disabled persons not only as being different, but also as to some degree inferior or disadvantaged. A less stimulus-bound interpretation of the scores might be that anyone who perceives disabled persons as being different, and to some extent inferior, may be considered to be prejudiced toward them.

The monograph contains an extensive review of the literature pertaining to the measurement of attitudes toward disabled persons. It was concluded that although many different techniques had been used, lack of data made it difficult to assess the adequacy of each technique. Furthermore, many of the instruments used in the past were designed to measure attitudes toward a specific disability rather than attitudes toward disabled persons in general.

The ATDP is short and easy to administer and to score. Three forms have been developed, an original 20 item form and two subsequent forms of 30 items each. The scale can be used with either disabled or non-disabled persons. Since results of the data analysis indicated that disabled persons tend to obtain different scores from non-disabled persons, and that under some circumstances women obtain different scores than men, separate sets of norms were developed for each of these groups.

There have been many studies of the reliability of the ATDP. The obtained coefficients have ranged from a low .57 to a high of .83, with a median value of approximately .74. These reliability coefficients are comparable to those usually obtained with attitude scales of similar length. As is true in most such scales, the authors caution the user against heavy reliance on the use of the measure for individual prediction. Data indicate that the ATDP is relatively not fakeable. It has also been found that neither social desirability nor acquiescent response set account for significant portions of the variance in ATDP scores.

The outline that follows summarizes the results of the various studies that have used the ATDP. The results as stated are oversimplified as would be the case in any brief abstract of a monograph of over 10 pages. The complete monograph contains full discussions of the issues, including qualifications of the findings where appropriate.

Demographic Correlates.

1. Age – no relationship.
2. Education – increased acceptance of disabled with increased amounts of formal education.
3. Sex – females tend to show greater acceptance of disabled.
4. Disability variables (degree, type, age at disablement) – no relationship.

Personality Correlates.

1. Need for aggression – low need related to acceptance.
2. Need for intraception – high need related to acceptance.
3. Self-acceptance – acceptance of the disabled was positively related to a self-acceptance among non-disabled persons.
4. Anxiety – low anxiety related to acceptance.
5. Measures of interest and intelligence – no relationship.

Attitudinal Correlates.

1. Other measures of attitudes toward disabled – positive attitudes related to acceptance.
2. Attitudes toward other disadvantaged groups (mentally ill, aged, minority ethnic groups) – positive attitudes related to acceptance.
3. Authoritarian attitudes – low authoritarianism related to acceptance.

Experiential and Behavioral Correlates.

1. Contact with disabled persons – some types of contact are related to increased acceptance.
2. Disability related educational experiences – sometimes related to increased acceptance.
3. Job performance – among disabled persons, positive ATDP scores are positively correlated to measures of performance on the job.
4. Job satisfaction – disabled persons with positive ATDP scores tend to be more job satisfied.

ACHIEVEMENT MOTIVATION AMONG NEGRO ADOLESCENTS IN REGULAR AND SPECIAL EDUCATION PROGRAMS

Zito, R. S. and Bordon, J. J. American Journal of Mental Deficiency, 1969, 74, 20-25.

This study was designed to investigate possible differences in motivation to achieve between a group of Negro educable retarded adolescents experiencing a special education program and another group of Negro educable retardates experiencing a regular school program. A third group of Negroes of normal intelligence in regular classes was included for comparative purposes. The two aspects of motivation which were studied were achievement fantasy, measured by McClelland's need achievement (Ach.) system; and objective goal-setting behavior as measured by a level of aspiration procedure.

The Negro educable retarded adolescents were legally classified as educable mentally retarded by certified school psychologists and were in New Jersey public schools at the time of the study. The subjects were of both sexes, ranging in age from 13 to 14.9 with I.Q. scores from 60-75. The special class retardate sample was comprised of 50 subjects randomly selected from those in the retarded population who had been in special education classes for at least three years preceding the study. The regular class retardate sample of 50 subjects was randomly chosen from among those legally classified retardates who had always been in the regular school program and who were on the waiting list for placement in special education classes at the time of the study.

In order to insure that the selection of subjects were not influenced by factors of selectivity in their placement, the cumulative record of each was examined for four possible predisposing factors. There was found to be no significant differences among subjects on physical problems, behavior problems, status of family stability, or years in present neighborhood.

Three instruments were employed in the study to measure the specific variables of interest. Four appropriate TAT cards were used along with instructions designed to arouse achievement imagery. The second test was the reading section of the Wide Range Achievement test. Finally a page of random alphabetic letters were presented with the task being to cross out as many letter E's as possible within a definite time limit.

Levels of aspiration were obtained under neutral conditions from all subjects. Shifts in level of aspirations were obtained, one-half of each group tested under success conditions and one-half under failure conditions.

All instruments were administered individually in a uniform sequence to the subjects in half-hour sessions. All subjects received coded numbers prior to scoring the responses in order to insure objectivity on the part of the scorers.

A chi-square analysis between sexes for all three groups was found to be non-significant, so that subject sex did not differentially influence the results of the study.

The results supported the hypothesis which predicted that regular class retardates, compared with the special class group, would a) show greater shifting of aspiration level

following a success experience, and b) have greater word recognition. Strong trends in the predicted direction were noted in the hypotheses which anticipated that the regular class retardates, compared with the special group, would a) be less fearful of failure, b) be more hopeful of success, and c) show greater shifting of aspiration level following a failure experience. The tests of these hypotheses were found to be not statistically significant.

The hypotheses which predicted that the regular class retardates, compared with the special class group, would a) be less realistic in setting their level of aspiration and b) have greater achievement imagery, were not supported by the statistical tests, nor were any strong trends noted.

These results strongly suggest that Negro adolescents enrolled in the regular school program (normals and retardates) were similar in hope of success imagery and fear of failure imagery. The regular class retardates were most unlike normal subjects and special class retardates in reality-motivated behavior. All three groups proved to be highly similar in amount of basic achievement motivation and in shifting of aspiration level following failure experiences. In word recognition, the retarded pupils in the regular classes were more advanced than their counterparts in the same special education program in the same jur ior high school.

From these findings, the authors conclude that: (a) retarded negro adolescents seem to be influenced more by success than by failure, (b) Negro retardates have basic achievement motivation comparable to normal negroes from the same socioeconomic background, (c) special class experience, more than regular class, seems to make educable adolescents cautious in setting goals, (d) special class retardates seem to anticipate failure to achieve goals, (e) regular class retardates, seem to anticipate success in achieving goals, and (f) regular class retardates have greater achievement in word recognition than special class retardates.

The implications from such findings are that special education programs for the retarded need to be modified. Several recommendations were made. First is the initiation of academic goals which are clear and attainable for those students in special classes. These goals, once achieved, could be raised slightly higher to further motivate the student. Second, the retardates might benefit from participating in non-academic classes with normal students. Finally, attendance in lower track regular academic classes might serve to improve the achievement of many adolescents.

The authors conclude by suggesting replication with white subjects of normal and retarded intelligence, subjects prior to adolescence and in late adolescence, subjects in institutional settings, and subjects with handicaps other than retardation.